Amendment to Claims:

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (currently amended): The system as recited in Claim ~~2~~ 21 in which said translator comprises:

eight poles and windings of four phases.

Claim 4 (currently amended): The system as recited in Claim ~~2~~ 21 further comprising:

(d) means for measurement of an absolute position of said translator relative to said stator.

Claim 5 (original): The system as recited in Claim 4, further comprising:

(e) means for measurement of currents associated with each phase of said multi-phase excitation.

Claim 6 (original): The system as recited in Claim 5, further comprising:

(f) means for establishing command values for currents associated with each phase of said multi-phase excitation producing said longitudinal force;

(g) means for comparing said currents to respective command values

thereof to produce respective error values; and

(h) means for monitoring said error values.

Claim 7 (canceled)

Claim 8 (currently amended): The system as recited in Claim 5, further comprising:

(k) a plurality of PROMS for continual storage of dynamic values of translator position and each phase current associated therewith;

(l) for each PROM, means for storage of propulsive force values as a function of each of said dynamic values stored in each PROM; and

(m) means for summing said propulsive forces.

Claim 9 (original): The system as recited in Claim 8, further comprising:

(n) for each PROM, means for storage of levitation force values associated with said normal force; and

(o) means for summing said levitation forces.

Claim 10 (original): The system as recited in Claim 9, further comprising:

means for establishing command values for currents associated with each phase of said multi-phase excitation producing said longitudinal force;

means for comparing said currents to respective command values thereof to produce respective error values; and

means for monitoring said error values.

Claim 11 (original): The system as recited in Claim 10, further comprising:

means for applying said respective error values to a carrier signal; and

means for applying respective error values of said signal to respective phases of said excitation current of said LSRM.

Claim 12 (currently amended): The system as recited in Claim ~~7~~, 22 further comprising:

means for dynamically compensating for out-of-limit error values.

Claim13 (original): The system as recited in Claim 11, further comprising:

means for dynamically compensating for out-of-limit error values.

Claim 14 (currently amended): The system as recited in Claim ~~7~~, 22 further comprising:

a second LSRM, said LSRM in electromagnetic engagement with said first LSRM, having means for DC multi-phase excitation of a stator and translator thereof, to thereby produce a guidance force for said system using said error values of said second LSRM.

Claim15 (original): The system as recited in Claim 14 in which said second LSRM is in quadrature with said first LSRM.

Claim16 (original). The system as recited in Claim 15, further comprising: means for dynamically compensating for out-of-limit error values

Claim 17(original). The system as recited in Claim 16, further comprising: means for independent control of said guidance force of said second LSRM.

Claim 18 (currently amended). The system as recited in Claim ~~7~~ 22, in which said translation system comprises:

a part of any of a transportation system, an elevator, a rocket launcher, an aircraft launcher, a rail gun, a conveyor, a door opener, a machine tool, or a servodrive.

Claim19 (original). The system as recited in Claim 18, further comprising: a second LSRM, said LSRM in electromagnetic engagement with said first LSRM, having means for DC multi-phase excitation of a stator and translator thereof, to thereby produce a guidance force for said system using said error values of second LSRM

Claim 20 (original). The system as recited in Claim 19, in which either of said LSRM comprise a longitudinal or transverse flux type machine.

Claim 21 (new): A multi-phase translation system, comprising:

(a) a first linear switched reluctance machine (LSRM) having a stator and a translator configured, positioned and proportioned for electromagnetic, substantially non-mutually inductive, engagement with each other;

(b) means for selectable application of at least one phase of a multi-phase DC excitation to said LSRM, to produce a longitudinal propulsive force between said stator and said translator;

(c) means for substantially simultaneous application of at least two phases of said multi-phase excitation to said LSRM to produce a selectable value of said normal force between said stator and translator; and

(d) means for independent control of said DC excitation of said application means (b) and of said multi-phase excitation of said application means (c) above.

Claim 22 (new): The system as recited in Claim 6, further comprising:

(i) means for applying said respective error values to a carrier signal, said values associated with said command value of said comparing means (g); and

(j) means for applying respective error values of said signal to respective phases of said excitation current of said LSRM.